REMARKS

Respectfully submitted,

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MARKED UP VERSION

As indicated above, trash bags are typically folded at least twice axially into a multi-layer, fractional width configuration prior to being wound into rolls. Even with the trash bags folded into as many as four layers, it is feasible to direct a signal, typically an electric spark, through the perforations situated next to the seal which separates the leading and following trash bags. The signal passes through the perforations and engages a suitable target which triggers the steps involved in separating the following trash bag from the leading trash bag and positioning the leading end of the following trash bag in an overlapping relationship with the trailing end of the leading trash bag.

It is also known to provide wave-cut trash bags. A wave-cut trash bag has a wave or lobe-shaped configuration at its open end. This provides two or more lobes which can be used to tie the trash bag in a closed configuration after it is filled.

Edge-type wave-cut trash bags are manufactured by providing closely spaced, parallel transversely extending seals at predetermined intervals along the length of a flattened blown film polymeric tube. A transversely extending line of perforations is provided between the closely spaced, parallel seals. The flattened blown film

tube is then separated longitudinally along a wave or lobe-shaped line located equidistant between the edges of the tube.

It is known that edge-type wave-cut trash bags can be assembled overlapping dispensing on a roll in the same manner described hereinabvoe in conjunction with conventional trash bags.

End-type ~~Wave-cut~~ wave-cut trash bags are ~~typically~~ manufactured by providing sets of closely spaced, parallel transversely extending seals at predetermined intervals along the length of a flattened blown-film polymeric tube. A transversely extending line of perforations is provided between the closely spaced, parallel seals. A wave or lobe-shaped line of perforation is formed across the flattened blown-film tube at a location equidistant between successive sets of spaced, parallel seals.

Prior to the present invention at least three factors have prevented the successful application of overlapping dispensing to end-type wave-cut trash bags on a roll. First, because wave-cut trash bags are folded axially into a fractional width configuration, the lobe or wave-shaped line of perforations which define the open ends of the trash bags are non-aligned. This fact negates the traditional method of identifying trash bag ends by

directing a signal through perforations comprising all of the trash bag layers. Second, the perforations which are utilized to separate adjacent trash bags comprising a flattened blown-film polymeric tube are traditionally evenly spaced. However, it has been found that the use of evenly spaced perforations at the lobe or wave-shaped ends of wave-cut trash bags results in force concentrations which in turn causes skewing of the trash bags when wave-cut trash bags are separated longitudinally to facilitate the overlapping dispensing process. Third, when wave-cut trash bags are folded axially to provide a fractional width configuration and are subsequently separated longitudinally to facilitate overlapping dispensing, one of the lobes of the wave-cut open end of the trash bag forms a single layer extension which must be manipulated in order to position the leading end of the following trash bag in an overlapping relationship with the trailing end of the preceding trash bag. Heretofore it has not been considered possible to utilize the traditional air current technique to manipulate the single polymeric layer.

The present invention overcomes the foregoing and other problems which have long since characterized the prior art. In accordance with the broader aspects of the invention, identification of the lines of perforations